

Oregon State Public Health Laboratory



Mission **To provide & assure quality laboratory testing throughout Oregon**

Established **1903 under State Board of Health**

Workload **9 million tests on 450,000 samples per year**

OSPHL Core Functions

- **Testing for communicable diseases of PH importance & special pathogens**
- **Rapid response to PH emergencies & bioterrorism**
- **Screening newborns for genetic disorders of body chemistry**
- **Testing environmental samples for microbial contamination**
- **Providing training for clinical labs & local health departments**
- **Licensing or accrediting clinical & environmental laboratories**

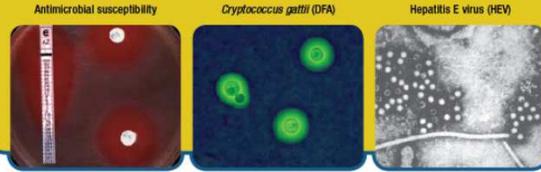
Communicable Disease Testing

Who sends CD samples to OSPHL?

- Local health departments
- State epidemiology programs
- Community health centers
- Clinical labs



Local health department information
For a list of local health department phone numbers go to: www.healthoregon.org/lhd



OREGON PUBLIC HEALTH DIVISION REPORTING FOR LABORATORIES

By law,¹ Oregon labs must report all human test results "indicative of and specific for" the following diseases, infections, microorganisms, and conditions listed in the accompanying table. These results include microbiological culture, isolation, or identification; assays for specific antibodies; and identification of specific antigens, toxins, or nucleic acid sequences.

In general, reports must be made to the patient's local public health department within one working day of the initial test report.² Labs identifying possible agents of bioterrorism should contact their local health department and refer the isolates to the Oregon State Public Health Laboratory immediately, day or night. Reports must include the patient's name, date of birth, county of residence, specimen collection date, lab test and result, and contact information for the ordering clinician and the lab. If possible, patient gender and street address should also be submitted.

The lab that reports to the clinician is responsible for reporting to public health, regardless of which lab actually performs the test. Reports on out-of-state residents should be made directly to that state's health department, or to the Public Health Division of the Oregon Health Authority. Document these reports in a log.

Oregon law requires labs that send an average of >30 records per month to the local public health authority to submit the data electronically in accordance with standards set forth in the Oregon Health Authority's Manual for Mandatory Electronic Laboratory Reporting (ELR).³

- Please contact us at 971-673-1111 for ELR initiation, assistance, and approval.
- Qualifying labs that fail to seek or obtain ELR approval may be subject to civil penalties in accordance with Oregon Administrative Rule (OAR) 333-026-0030.⁴
- Labs required to report via ELR shall have a state-approved continuity of operations plan to maintain reporting in emergency situations. At least two alternative methodologies should be incorporated, such as facsimile, mail, or courier service.

Legionella pneumophila



Oregon Health Authority



PUBLIC HEALTH DIVISION
Office of Disease Prevention and Epidemiology
971-673-1111 (phone)
971-673-1100 (fax)
www.healthoregon.org/acd

- A licensed laboratory required to report data electronically shall participate fully in Oregon's Data Quality Control program, as specified in the Oregon Health Authority's Manual for Mandatory Electronic Laboratory Reporting.³
- Electronically submitted reports shall meet relevant reporting timelines.⁵
- Prior to issuing a notice of imposition of civil penalty, the Oregon Health Authority or the local public health authority shall send a written warning letter advising the person or entity that they are not in compliance and that continued noncompliance may result in the issuance of a civil penalty.

CIVIL PENALTIES FOR VIOLATIONS OF OREGON REPORTING LAW

- A civil penalty may be imposed against a clinical laboratory for failing to report a reportable disease in accordance with Oregon Administrative Rules.⁴

Civil penalties shall be imposed as follows:

- 1st violation \$100; 2nd violation \$200; 3rd or subsequent violation \$500;
- Each day out of compliance will be considered a new violation.

☞ Report by phone immediately, any time day or night. New reportables are highlighted.

BACTERIA

Bacillus anthracis ☞
Bordetella pertussis
Borrelia
Brucella
Campylobacter
Chlamydia trachomatis
Chlamydia pneumoniae
Clostridium botulinum ☞
Clostridium tetani
Corynebacterium diphtheriae ☞
Coxiella burnetii

Enterobacteriaceae family isolates found to be non-susceptible to any carbapenem antibiotic⁵
Ehrlichia/Anaplasma
Escherichia coli (Shiga-toxinogenic)⁶
Francisella tularensis ☞
Haemophilus ducreyi
Haemophilus influenzae^{5,7}
Legionella
Leptospira
*Listeria monocytogenes*⁵
*Mycobacterium bovis*⁵
*Mycobacterium tuberculosis*⁵
Neisseria gonorrhoeae
Neisseria meningitidis^{5,7}
Rickettsia
*Salmonella*⁵
*Shigella*⁵
Treponema pallidum

*Vibrio cholerae*⁵ ☞
*Vibrio, non-cholerae*⁵
*Yersinia pestis*⁵ ☞
*Yersinia, non-pestis*⁵

FUNGI

*Cryptococcus*⁵

PARASITES

Babesia
Cryptosporidium
Cyclospora
Giardia
Plasmodium
*Taenia solium*⁵
Trichinella

VIRUSES

Arboviruses¹
Arenaviruses¹⁰ ☞
Filoviruses¹⁰ ☞
Hantavirus
Hepatitis A⁸
Hepatitis B⁹
Hepatitis C
Hepatitis D (delta)
Hepatitis E
Hemorrhagic fever viruses¹⁰ ☞
HIV infection and AIDS
Influenza, novel strain¹¹ ☞
Measles (rubeola) ☞
Mumps

Polio ☞
Rabies ☞
Rubella ☞
SARS-coronavirus ☞
Variola major (smallpox) ☞
West Nile
Yellow fever ☞

OTHER IMPORTANT REPORTABLES

Any "uncommon illness of potential public health significance"¹

Any outbreak of disease¹

Any other arthropod-borne viruses¹

California encephalitis
Colorado tick fever
Dengue
Eastern equine encephalitis
Kyasanur Forest
St. Louis encephalitis

All blood lead testing results, but lead poisoning should be reported within one local health department working day¹²

All CD4 counts and HIV viral loads
Creutzfeldt-Jakob disease (CJD)
and other prion illnesses

FOOTNOTES

1. Oregon Revised Statute 432.004, Oregon Administrative Rule 333-018 (http://arcweb.oss.state.or.us/pages/rules/eors_300/or_333/018.html)
2. Refer to <http://www.healthoregon.org/lhd> for a list of local health departments, reporting FAQs, and more details about what to report. When in doubt, report.
3. ORS 432.004 and OAR 333-018-010 (http://arcweb.oss.state.or.us/pages/rules/eors_300/or_333/018.html); Manual for Mandatory Electronic Laboratory Reporting (<http://www.healthoregon.org/lhdresource>)
4. ORS 431.262, OAR 333-018 (http://arcweb.oss.state.or.us/pages/rules/eors_300/or_333/018.html); OAR 333-026-0030 (http://arcweb.oss.state.or.us/pages/rules/eors_300/or_333/026.html)
5. Isolates must be forwarded to the Oregon State Public Health Laboratory (phone: 503-682-4100).
6. All confirmed or suspect isolates of E. coli O157, and all non-O157 Shiga-toxin-positive broths, must be forwarded to the Oregon State Public Health Laboratory (phone: 503-682-4100).
7. Report only isolates from normally sterile sites (e.g., neither sputum nor throat cultures).
8. Report cyclosporiasis and all undifferentiated *Taenia* spp. (e.g., eggs in stool O & P).
9. IgM-positive HAV and HBV serum specimens must be forwarded to the Oregon State Public Health Laboratory.
10. Hemorrhagic fever caused by viruses of the *Bunyavirus* (e.g., Eboles, Marburg) or *arenavirus* (e.g., Lassa, *Mechorpus*) families are reportable.
11. Influenza A virus that cannot be subtyped by commercially distributed assays.
12. "Lead poisoning" means a blood lead level of at least 10 micrograms per deciliter.

OHA 8576 (Rev. 11/2011)

Disease reporting & lab-based surveillance

OSPHL CD Testing (Examples)

Bacteria

Salmonella, Shigella, E. coli

Campylobacter

Tuberculosis

Syphilis

Chlamydia

Pertussis (whooping cough)

Plague*

Meningococcal disease

Diphtheria

Listeriosis

Lyme Disease

Gonorrhea

Botulism*

Anthrax*

Brucellosis*

Tularemia*

Viruses

HIV/AIDS

Respiratory viruses
(e.g. influenza)

Hepatitis A, B, & C

Rabies

Norovirus

Sapovirus

Astrovirus

West Nile Virus

Rubella

Rubeola (measles)

Poliovirus

Hantavirus

Poxviruses*

Protozoa

Giardiasis

Cryptosporidiosis

Amoebic dysentery

Malaria

Helminths

Tapeworms

Roundworms

Flukes

Fungi

Cryptococcus

* CDC "Select Agents" for bioterrorism

Newborn Screening



All infants are screened for 40+ disorders

What do these disorders have in common?

- **Untreated, they cause serious disability or death**
- **They can be prevented or controlled if detected before disease develops**
- **Most have a genetic basis**
- **Many are the result of a defective enzyme in a key metabolic pathway**

Samples from hospitals, midwives, physicians



Code 703

Hispanic? No Yes

Other's Birth Date 11/27/71

Lbs. oz 2

gms 0

Lbs. oz 2

CODE

2300351

AVOID HANDLING COLLECTION AREA

EXPIRES 1 - 1 - 04

S & S[®] 903[™]

LOT # W-001 AK 1021104636

COMPLETELY FILL IN ALL CIRCLES WITH BLOOD.
BE SURE THAT BLOOD SOAKS COMPLETELY
THROUGH FILTER PAPER.

Four circular filter paper samples are shown at the bottom of the form. The first and fourth are solid brown circles with dashed outlines. The second and third are similar circles but have four small circular holes in the center, arranged in a 2x2 grid.



Hospitals & Physicians

**State Program Admin
Follow Up
Education**

**State Health Agency (AK, NV,
ID, NM, HI)**



**Oregon Health
Authority/OSPHL**

**Test Results
Medical Consultation
Education/Information
Short-term F/U
QA Profiles**

**OHSU Dept of
Pediatrics**



Laboratory Compliance



Laboratory Compliance

- **Licensure/Certification of 2,400 clinical labs under State (ORS 438) and Federal (CLIA) laws**
- **Oregon Environmental Laboratory Accreditation Program (ORELAP)**
- **Substance of Abuse Screening Laboratory Licensure**
- **Health Screen Testing Service permits**

Impact of OSPHL Services

- **No-charge or at-cost lab testing for local health depts, community clinics, & their clients**
- **Lab-based surveillance to detect & identify communicable diseases in high-risk populations**
- **Support to identify, investigate & control outbreaks**
- **Assuring that specialized testing is available; rabies, botulism, genetic typing for epidemiology, etc.**
- **Prevention of life-threatening & disabling disorders of newborns & children**
- **Assuring that clinical & environmental lab testing in Oregon meets national standards**

AN ABSTRACT OF THE BOOKS OF THE
 OREGON STATE BOARD OF HEALTH,
 From 1st December to 1st January.(end of year)

Furnished to each member of the Board.

ec.6	J.R.Whitney,printing bills for all work done for Board during year bills allowed at Dec.meeting.	439.89
	G.F.Rodgers, binding bulletins	83.60
	Postage during December	6.50
ec. 16	Kilham Sta.Co.Stationery and office supplies during month	4.35
	Cabinets for filing statistics and correspondence	127.05
ec.28	Felloes,cuts for smallpox bulletin	4.37
" 29	Wm.Gadsby,Table and chairs for office	34.65
" 29	Dr.Harry Lane,expenses to Salem meeting	3.30
"	Dr.Hutchinson do.	3.30
"	Dr.E.Barton Pickel, do.	26.85
"	Dr.C.J.Smith, do.	4.00
" 29	Telephone for December	10.65
"	Office rent for December	35.00
"	Salaries of Dr.Hutchinson and Clerk for quarter	750.00
"	W.L.Buckner, Carpenter work necessary in installing laboratory,making new book shelves and cases,	78.40
"	Robert Gillan, plumbing for laboratory	90.00
"	Woodward Clarke & Co. Laboratory of Board, (a complete detail of which will be given later)	407.64
"	John Barrett Co. office lamp	6.15
"	J.K.Gill & Co.books for State Board library. (a complete catalogue of which will be furnished very soon)	159.70
"	Dr.E.A.Pierce, Telephone and postage expenses for the Board	2.10
"	Post Special delivery Co.work during December	1.50
		<u>\$2279.00</u>
	Previous expenses	2720.96
		<u>\$4999.96</u>

**Oregon State Board
 of Health
 Dec 29, 1903**

RECAPITULATION OF THE DISBURSEMENTS OF THE
STATE BOARD OF HEALTH.
1905.

FURNITURE & FIXTURES:

April	8	Typewriting desk	6.00	
May	1	Small table	3.25	
June	1	Office chair	12.00	
July	1	Typewriter machine	50.00	
"	11	Office chair	7.50	
"	11	Shades for windows	1.50	
Aug.	17	Rugs for office	27.50	
	31	Shelving, etc.	32.27	
Oct.	19	Couch	22.50	
	20	1 Roll-top desk	40.00	
Dec.	29	2 stools for laboratory	5.65	
		2 Chairs	9.00	
		1 Oak table	20.00	
	31	Carpenter work for laboratory	78.40	
	31	Plumbing for lab.	90.00	
	31	Laboratory equipment	407.64	
	31	1 lamp	6.15	
	31	Filing cabinets	127.05	
	31	Books for library	159.70	\$1106.11

SALARIES:

March to Dec. 31st:			
Dr. Hutchinson		1909.65	
Office assistance		480.00	2389.65

TRAVEL EXPENSE 295.80

OFFICE EXPENSE 1208.40

Total expenses \$4999.96

Oregon State Hygienic Laboratory 1924

Wilma Hemstock
Dr. William Levin

Acme Photo.

HYGIENIC LABORATORY STAFF 1924





OSPHL Revenue 2013-15

State General Funds		\$2,970,708 (9.6%)
Federal Funds		8,341,768 (26.8%)
Other Funds*		19,758,882 (63.6%)
NBS fees (Oregon)	\$ 4,314,447	
NBS fees (non-Oregon)	12,614,463	
Other testing fees**	2,121,466	
Licensing fees	708,506	
TOTAL REVENUE		\$31,071,358 (100%)

***Excluding Cost Allocation**

****Excluding ~\$600,000 in STI testing charge-backs**

State PH Laboratory Funding*

By Source of Funds, US, 2010

Lab Size**	Federal %	State/Local%	Fees%	Other%
Large (>140 FTE)	15.7	35.4	26.2	22.7
Medium (74-140 FTE)	26.5	24.1	48.0	1.4
Small (<74 FTE)	32.5	40.6	17.3	9.6
OSPHL (77 FTE)	26.8	9.6	63.6	0
OSPHL minus other states' NBS fees	45.2	16.1	38.7	0

*Source: APHL Core Laboratory Profiles Survey 2010

**Based on 37 responses:

11 large; ave annual budget \$30.9 million

13 medium; ave annual budget \$14.6 million (OSPHL \$15.5 million)

13 small; ave annual budget \$7.1 million

OSPHL Funding

- **Small percentage of GF leverages FF for core communicable disease testing**
- **High dependency on FF to provide core communicable disease testing services**
- **Billing of Medicaid and other insurers for communicable disease testing enhances financial stability and leverages FF**
- **Newborn screening contracts with other states keep Oregon NBS costs lower and help pay for general lab expenses**